

Alg. workbook CH. 5.4

#1-4

① $y = 3x + 4$

$$x = 0 \quad y = 3 \cdot 0 + 4 = 4$$

#5-6

⑤

$$y = mx + b$$

$$b = 4$$

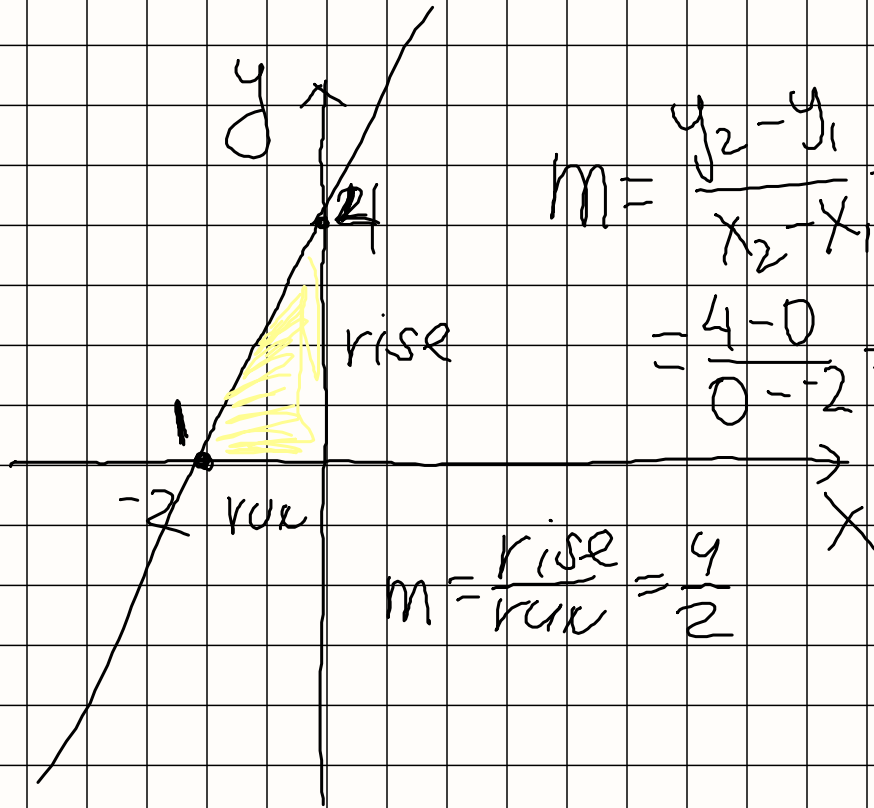
$$m = \frac{\text{rise}}{\text{run}} = \frac{4}{2} = 2$$

$$y = 2x + 4$$

#5

x_1, y_1
1(-2, 0)

2(0, 4)
 x_2, y_2



#7-8

7. $y = mx + b$

↓ ↓

SLOPE INTERCEPT

#9-12

#9

$(0, -4)$

$m = 2$

$y = mx + b$

$y = 2x - 4$

$-4 = 2 \cdot 0 + b \quad ; \quad -4 = b$

$$\textcircled{10} \quad \begin{matrix} (0, 6) \\ x, y \end{matrix} \quad m = \frac{1}{2}$$

$$y = mx + b$$

$$6 = \frac{1}{2} \cdot 0 + b \quad b = 6$$

$$y = \frac{1}{2}x + 6$$

13-16

13

$$\begin{array}{cc} (3, 8) & (2, 6) \\ x_1, y_1 & x_2, y_2 \end{array}$$

$$y = mx + \underline{\underline{b}}$$

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{6 - 8}{2 - 3} = \frac{-2}{-1} = 2$$

$$y = \underline{2}x + b$$

$$x_1 = 3$$

$$y_1 = 8$$

$$8 = 2 \cdot 3 + b$$

$$8 = 6 + b$$

$$b = 2$$

$$y = 2x + 2$$